DOCUMENT RESUME

ED 134 357 RC 009 626

AUTHOR Andrae, Annika
TITLE Non-Graded Instruction in Small Rural Lower Secondary Schools. A Presentation of the PANG-Project. Report No. 50.
INSTITUTION Gothenburg Univ. (Sweden). Inst. of Education.
PUB DATE Jul 76
NOTE 24p.; Paper presented at the INTERSKOLA Conference (Sveg, Sweden, July 1976). For related document, see ED 072 885

EDRS PRICE MF-$0.83 HC-$1.67 Plus Postage.
DESCRIPTORS *Decentralized School Design; Educational Programs; Evaluation Methods; Foreign Countries; *Nongraded System; Program Descriptions; *Rural Schools; *Secondary Schools; *Small Schools; *Ungraded Schools
IDENTIFIERS *Sweden

ABSTRACT

The Process Analysis of Non-Grading (PANG) project was initiated from experiences in a small school pilot study of a nongraded school system in Sweden. This small school suggested a nongraded upper comprehensive school (pupil age 14-16 years). Since 1972 the PANG project has successfully worked out a nongraded system at the secondary level in four one-class schools and one two-class school. In the comparison schools, chosen from districts of the same economic, social, and employment structure, the classes mostly contain pupils who live at a boarding-house in the central village during the week. During the 1975-76 school session, the total situation and development of the pupils in the nongraded school system and in the graded system in a school far away from home will be analyzed. This analysis will encompass two main areas: (1) the instructional situation--factors concerned with the educational process in the nongraded system and its effect on pupil attitudes and knowledge compared to a traditionally graded system; and (2) the social situation--factors which consider how the pupils' situation at home, among friends and within the community changes when changed from one teaching system to another, from one living place to another, and when transportation circumstances change. This report describes how this analysis will be conducted. (NQ)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

Rec 23-11-76

ED134357

Reports from

THE INSTITUTE OF EDUCATION
UNIVERSITY OF GÖTEBORG

U S DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION

THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

20

Non-graded instruction in small rural lower secondary schools.
A presentation of the PANG-project.

Paper read at the INTERSKOLA conference in Sveg, July 1976

ANNIKA ANDRAE

RC 009626

No 50

July 1976

INSTITUTE OF EDUCATION, UNIVERSITY OF GÖTEBORG Fack S-431 20 MÖLNDAL SWEDEN

Introduction

The PANG-project (PANG = Process Analysis of Non-Grading) was started at the Institute of Education at the University of Göteborg. From the 1st of July -76 the project will be continued at the University of Uppsala [1]. The project is carried out by means granted by the National Board of Education. Its central objective is to contribute to a deeper understanding and knowledge of the functioning of the Swedish school system. Results and experiences from the project are to be used within the continuous reform work of the development of the Compulsory School Curriculum with focus on the smaller secondary school. Keeping the school up to date, so to say, or in another way: Meeting new problems and trying to solve them.

Lately the school problems in the rural areas have been subject to much discussion. This is due to a combination of different factors, namely the centralized school curriculum, the organization of which often is more suitable to schools of a certain number of pupils and the decrease of the rural population due to rationalization and centralization. Great distances to service, place of work and social contacts are endemic features of the rural areas. Small schools, fewer and fewer pupils, long rides between home and school or to board and lodge in the main town for the pupils is another problem. This has been a problem to an increasing number of schools during the latest decade.

Pilot study

The PANG-project was initiated from experiences in a small-school-pilot study of a nongraded school system (Andrae 1971, 1972, Andrae & Dahllöf 1973). This small school had suggested a nongraded upper of comprehensive school (pupil age 14-16 years). Positive preliminary results from this pilot study and theoretical and methodological development in earlier projects (Andrae 1972, Dahllöf 1971, 1974, Lundgren 1972) then formed the basis for the later PANG-project.

---

1) University of Uppsala, Department of Education, Vasagatan 1 A, 752 24 UPPSALA

Objectives

The main objective of the study is to analyze the total situation and development of the pupils in a nongraded school system and in the alternative which would be actual if the small school is closed. This alternative would be a graded system in a school far away from home. In this situation the pupils get even farther daily-travelling than they are used to, or they have to live at a boarding-house during the week. These different alternatives or frame situations for pupils in rural areas are described in figure 1.

Figure 1. Frame situations and comparison groups for pupils in graded and non-graded schools

Frame situations	Pupils living situation	School Community	Pupil transportation	Teaching model
Traditional: 1	At home	Local school	Rather short	Grading
Alternatives: 2	At home	Local school	Rather short	Non-grading
3	At home	Central school	Very long	Grading
4	Boarded	Central school	None	Grading

The analysis of the total situation can be looked upon as encompassing two main areas:

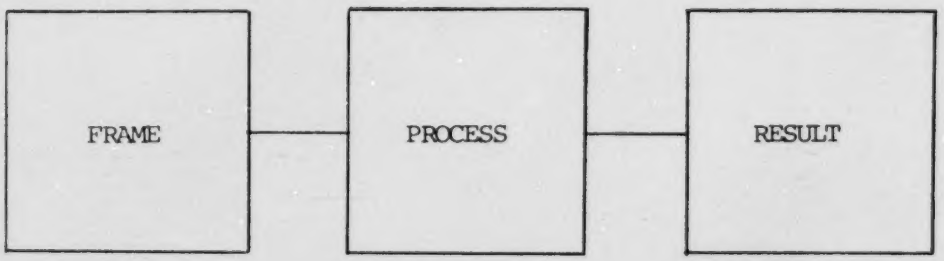
1) the instructional situation - factors concerned with the school, that is to say the educational process in the nongraded system and its effects on pupil attitudes and knowledge in comparison with a traditionally graded system.

2) the social situation - factors which take into consideration how the pupils' situation at home, among friends and within the community will change when you change from one teaching system to another, from one living place to another. These are factors like living and transportation circumstances, family relations, spare time business, peer relations and so on.

This project will apply principles of process- and pupil-analysis elaborated within earlier project work (Dahllöf a a, Lundgren a a) and further developed in the above mentioned pilot study (Andrae a a). From a theoretical point of view the nongraded system is interesting as a special case of a more individualized curriculum, the opposite of which is class teaching, where the pupils to a greater extent are taught collectively.

The experiment can also be described as a special frame situation for a follow-up study of a curriculum reform, where the main point will be the analysis of didactic problems and time-consumption under changed organizational patterns. This analysis is necessary in order to understand and discuss later results of achievement as well as attitudes. This discussion can easiest be understood in the following simplified model (figure 2).

Figure 2. Model of process analyses

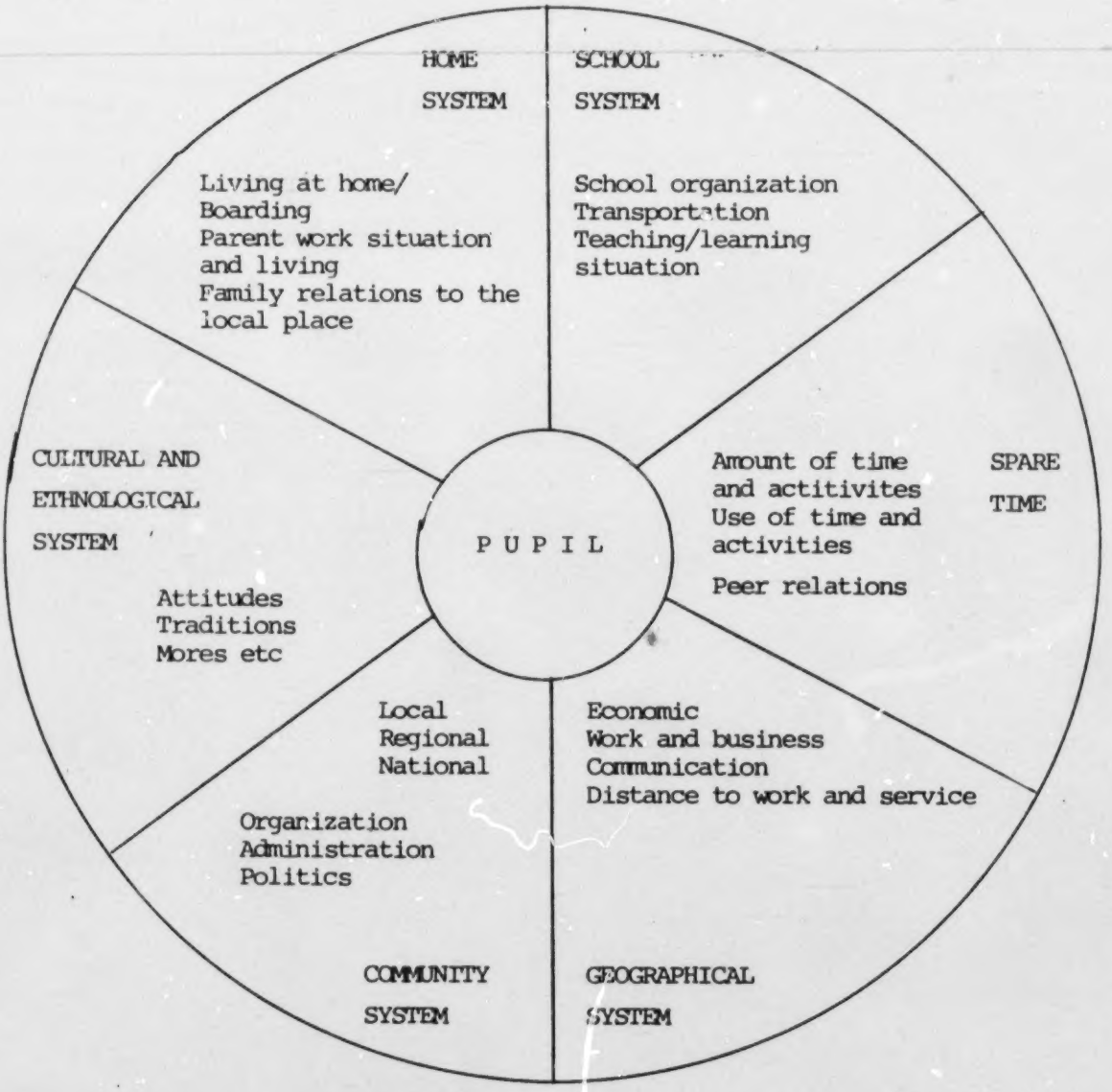


The same discussion can be applied to the social situation of the pupils, that is to say that there are possibilities as well as limitations for them to use their spare time, make their choice of leasure-time activities, work as well as studies and living alternative after compulsory school and as grown-up. These factors are to be found in their neighbourhood: the place where they live and the surroundings. Central factors in this part of the study will be time consumption for bus-rides to school, the extent of organized and informal activities, as well as in what extent these are used by the pupils etc.

This part of the study has close connection with geographical work concerned with time budget studies (Hägerstrand 1970, Andrae 1975), and ethnological studies of activity fields (Hogan 1973) are of a central interest. Another is the ethnological dimension of ideological and cultural ties to the district, where our secondary school pupils live. It is also close to the studies of guidance and vocational choice. Interdisciplinary cooperation is extremely important when the research problem is a concrete social community problem as well. Even if this problem contains a clear instructional question, it is at the same time just one part of greater totality, which can be illuminated from many points and in many sciences. Dynamics of behaviour and attitudes has to be explored within the context behaviour and attitudes of the individuals making up the life of a particular community. Thus, this is also an ecological study, where behaviour is conceived as an interactive process of environment and person in which the environment exercises a supporting, guiding or coercive influence (Campbell 1962). Realizing these ideas, an interdisciplinary cooperation with experts of cultural-geography at the University of Umeå is carried out (Hammarberg 1974). A summary of the totality discussed above is visualized in figure 3. The model is elaborated from that of Campbell (1962).

It has been possible to isolate a number of different components in the various parts of this model, for example the home situation and the community life, which are sensitive to such changes as a withdrawal of the upper grades. These factors have been studies by questionnaires and interviews to a selection of people.

Figure 3. Model of factor-sections of the total situation of pupils living in different school-districts



Experimental schools and the choice of comparison groups

In the PANG-project a nongraded system at the secondary level has successively been worked out in five small schools since 1972. Four of them are one-class schools and one of them a two-class school.

Comparison schools have been chosen from districts of the same economic, social and employment structure (Table 1). In the comparison schools the figures in the brachets indicate the selection of classes taking part in the project. These classes mostly contain pupils, who are living at a boarding-house in the central village during the week.

In figure 4 the schools have been located on the map of Sweden. The longer school-rides in the mountain district as well as the boarding situation in some of the comparison schools are geographically presented in diagram 1 and 2.

Table 1. Number of classes and pupils in the experimental and control-schools 1975/76.

Experimental schools			Comparison schools		
District schools	Number of Classes	Pupils	District schools	Number of Classes	Pupils
Forest district			Forest district		
RAMSJÖ	3	46	FREDRIKA	3	30
SOLBERG	3	48	MOSKOSEL	3	42
Mixed district			Mixed district		
STÖLLET	3	63	LIMA	6	111
HALLEN	3	77	RÄTAN	3	56
			SVENSTAVIK	13 (6)	338 (150)
Mountain district			Mountain district		
TÄRNABY	5	108	VILHELMINA	15 (3)	421 (78)
			SORSELE	8 (3)	183 (63)
			ARJEPLOG	8 (3)	173 (69)

Figure 4. Map of Sweden. Location of experimental and comparison schools.

DIAGRAM 1. EXPERIMENTAL SCHOOLS. PUPILS LIVING AT HOME, TRAVELLING AND BOARDED.

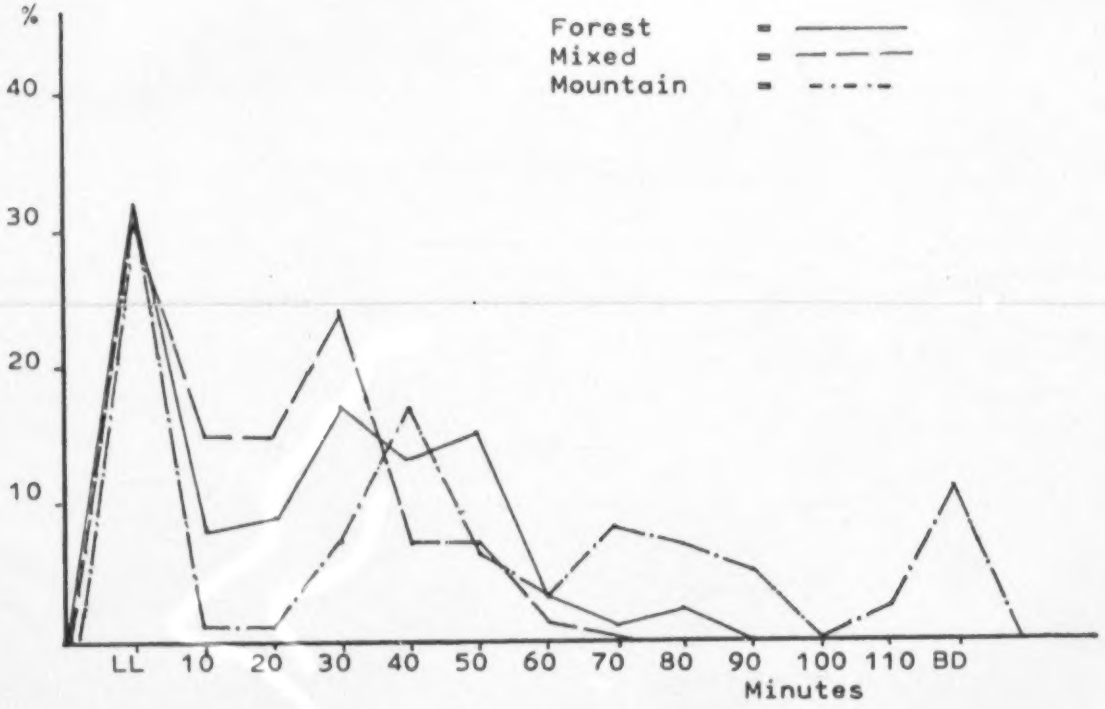
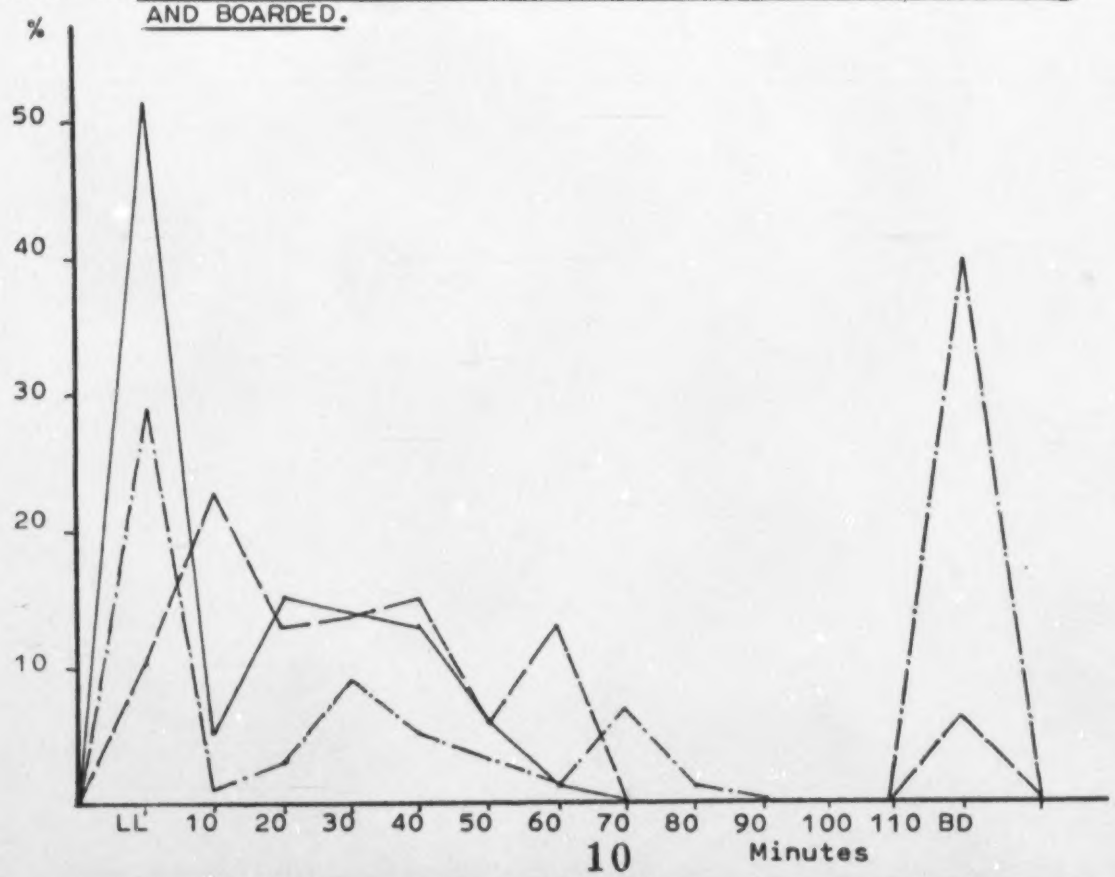


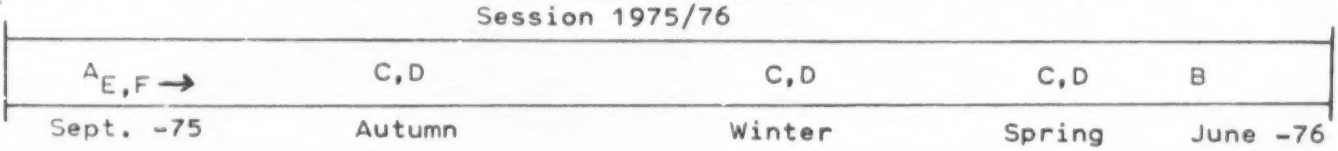
DIAGRAM 2. COMPARISSON SCHOOLS. PUPILS LIVING AT HOME, TRAVELLING AND BOARDED.



General design during the session 1975/76

During the session 1975/76 the main field work within the schools has taken place according to the following design (Figure 5).

FIGURE 5. MAIN STUDY OF THE PANG-PROJECT SESSION 1975/76.



A. BASIC DATA

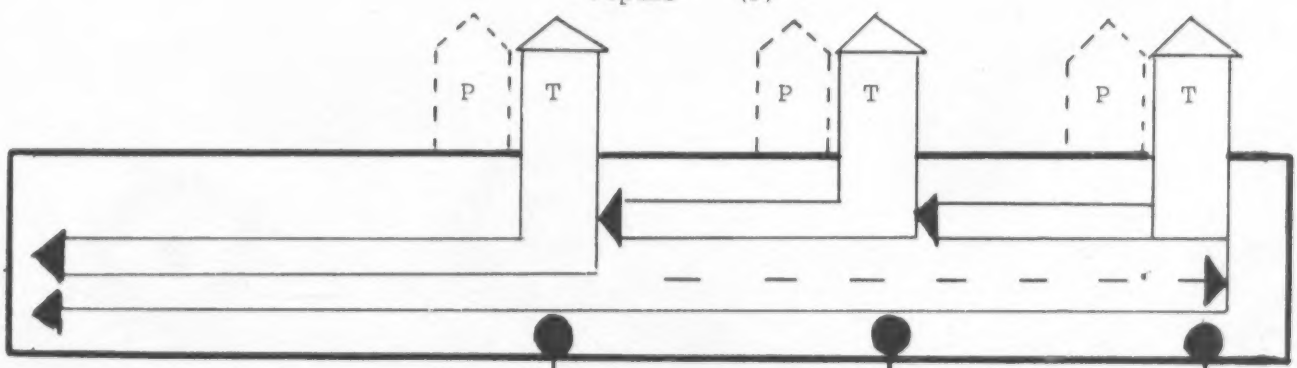
Teachers grade 6, 74/75
Pupil data grade 7 - 9, 75/76
Documents
School principals

B. SUMMING UP DATA

Teachers grade 7-9
Pupils grade 7-9
Documents
School principals

C. EXTENSIVE DATA

Teachers (T)
Pupils (P)



D. INTENSIVE DATA

a) Educational process
Teachers
Pupils

b) Social situation
Pupils
Parents

SAMPLE of subjects and lessons

SAMPLE of subjects and lessons

SAMPLE of subjects and lessons

RANDOM SAMPLE

RANDOM SAMPLE

RANDOM SAMPLE

Boarding home
Youth-leaders
Other people/organizations working with pupils

Leaders and assistants in the local school place

Leaders and assistants in the local school place

E. COMMUNITY DATA

Community leaders
Community school people
Documents

F. REGIONAL DATA

Regional school people
Documents

According to the model, the main points of the program have been the following:

A. BASIC DATA. Sept. 1975

1. Teachers grade 6, 74/75: Working process and experiences.

2. Pupil data grade 7-9, 75/76: Questionnaires (attitudes, social climate and school work experiences) and achievement tests.

3. Documents: Achieved data about pupil-progress and background.

4. School principal: Description of the school and administration concerning planning etc for the session.

B. SUMMING UP DATA. June 1976

Data from point A 2 - 4 have been followed up in a somewhat more detailed way.

C. EXTENSIVE DATA

1. Teachers. Three times during the year, teachers teaching Social- and Natural Sciences, Swedish, English and Math have got questionnaires about their teaching up to this date and their plans for the rest of the year.

2. Pupils. At the same time, the pupils have answered questions about their school work, peer-relations, spare time activities, bussing, choice of subjects, future plans and so on.

D. INTENSIVE DATA

a) 1. Teachers. Through sampling of lessons, the same subjects have been visited by observers three times during the session: The working situation in the class has been observed through time-sampling. After the lesson some questions have been put to the teachers concerning this specific lesson.

2. Pupils. At the same time the pupil situation has been observed.

3. In some of the experimental schools a successive registration of the work situation has been completed by the teachers as well as the pupils.

b) 1. Parents and pupils living within different distance from the local school place have been interviewed about their living situation, attitudes to different aspects of school, work situation, belongingness to the district, daily/weekly business travelling, school-travelling and the future for themselves and their children.

Different living situations of parents/children are represented in these samples, namely:

Living situation			Daily travelling
BD	=	Boarded pupils	
ET	=	Pupils with extremely long daily travelling	(60 min. -)
LT	=	Pupils with rather long daily travelling	(35 - 40 min.)
NT	=	Pupils with normally long daily travelling	(10 - 30 min.)
LL	=	Pupils living in the local school place, not travelling	

2. Other people interviewed about activities and other parts of the social situation for the pupils are:

The hostess of the boarding-house
Leaders and assistants of different organizations in the district
Cultural agencies
Social agencies
Church agencies
The police
School leaders
School hostess
School nurse
School psychologist
School social worker
and so on

E. COMMUNITY DATA

Economical, political, social and cultural data are collected in cooperation with cultural geographers at the University of Umeå and cultural data even to a certain extent in cooperation with ethnologists in Göteborg.

F. REGIONAL DATA

The same as under E. Some of these data are also concerned with contacts with the regional school board.

Summary comments upon the design and main study

Within this design empirical data have been collected and observation-studies have been carried out constituting the basis for further analyzing and broadening our knowledge of the above stated problems.

The analysis of these data will start this autumn as the empirical work has just been carried out.

There are a lot of practical, organizational and didactic experiences already made but not yet documented throughout the work within the project. However, these are extremely important to concentrate on and further discuss already in this conference.

Therefore it is a pleasure to me to give the floor to some of my co-operators in the experimental schools, principals as well as teachers. They will focus on and enlarge some of the instructional parts in the above presented evaluation program.

REFERENCES

Andrae, A. 1971: Metodutprövning för registrering av undervisningen inom ett årskurslöst högstadium. En preliminär redovisning av vissa data från läsåret 1970/71. (Värmlands-projektet nr 1) PANG-projektet nr 1. Göteborg: Rapporter från pedagogiska institutionen 64, Göteborgs universitet. Stencil.
(Elaboration of a method for registration of the educational process within a non-graded school system at the upper section of compulsory school).

Andrae, A. 1972: Årskurslöst högstadium. Metodutveckling och utvärdering av resultat efter ett års försök med en variant av årskurslös undervisning med tonvikten lagd vid orienteringsämnen. Design, instrument, beskrivning av undersökningsgrupperna samt resultatredovisning. (Värmlands-projektet nr 2) PANG-projektet nr 2. Göteborg: Rapporter från pedagogiska institutionen 71, Göteborgs universitet. Stencil.
(Non-grading at the upper section of compulsory school. Elaboration of methods and evaluation after one year of experimentation with a model for non-graded education in social science. Design, instruments, description of groups and results).

Andrae, A. 1972: Det fria tillvalet på grundskolans högstadium och vägen till gymnasiet. Licentiatavhandling. Göteborg: Pedagogiska institutionen, Göteborgs universitet.
(The individual option within the senior compulsory school and the option for the upper secondary school).

Andrae, A. 1975: Erfarenheter av en pilotstudie med intervjuer som underlag för kartläggning av problem rörande utbildningslokalisering i glesbygd. PANG-projektet nr 11, 1975. Göteborg: Rapporter från pedagogiska institutionen 124, Göteborgs universitet. Stencil.
(Experiences of a pilot study with interviews as a basis to list problems about education in sparsely populated areas).

Andrae, A. and Dahllöf, U. 1973: Process analysis of non-graded rural schools in Sweden. Outline of an evaluation project. Project PANG 5. Reports from the Institute of Education 31. Mimeo.

Campbell, W.J. Assisted by Davies, J. 1962: Growing up in Karribee. A Study of Child Growth and Development in an Australian Rural Community. Australian Council for Educational Research. Melbourne 1962.

Dahllöf, U. 1971 a: Ability Grouping, Content Validity and Curriculum Process Analysis. Teachers College Press, New York.

Dahllöf, U. 1974: Trends in Process-related Research on Curriculum and Teaching at Different Problem Levels in Educational Sciences. Scandinavian Journal of Educational Research. 1974.

Hammarberg, B. 1974: Glesbygden och samhällsplaneringen. En översikt i anslutning till inom GeoPANG-projektet genomförda och förestående studier i valda undersökningsområden. PANG-projektet nr 6, 1974. GeoPANG 1974:1. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(Sparsely populated areas and the planning of society).

Hogan, D.P. 1973: A Structural Comparison of Classroom Behaviour in Multi- and Single-Grade Classrooms. Department of Education, James Cook University of North Queensland, Australia. Mimeo.

Hägerstrand, T. 1970: Tidsanvändning och omgivningsstruktur. Bilaga 4, SOU 1970:14.
(Time budget and the surrounding structure).

Lundgren. U.P. 1972: Frame factors and the teaching process. Akad.avh. Stockholm: Almqvist och Wiksell.

Statens Offentliga Utredningar (SOU) 1970:14. Se Hägerstrand 1970.

Reports from the PANG-project

1. Andrae, A. 1971: Metodutprövning för registrering av undervisningen inom ett årskurslöst högstadium. En preliminär redovisning av vissa data från läsåret 1970/71. (Värmlands-projektet nr 1). Göteborg: Rapporter från pedagogiska institutionen 64, Göteborgs universitet. Stencil.
(Elaboration of a method for registration of the educational process within a non-graded school system at the upper section of compulsory school).

2. Andrae, A. 1972: Årskurslöst högstadium. Metodutveckling och utvärdering av resultat efter ett års försök med en variant av årskurslös undervisning med tonvikten lagd vid orienteringsämnen. Design, instrument, beskrivning av undersökningsgrupperna samt resultatredovisning. (Värmlands-projektet nr 2). Göteborg: Rapporter från pedagogiska institutionen 71, Göteborgs universitet. Stencil.
(Non-grading at the upper section of compulsory school. Elaboration of methods and evaluation after one year of experimentation with a model for non-graded education in social science. Design, instruments, description of groups and results).

3. Dahllöf, U. och Andrae, A. 1973: Forskningsprogram för processanalyser av årskurslöst högstadium. Göteborg: Rapporter från pedagogiska institutionen 88, Göteborgs universitet. Stencil.
(Research program for process analysis of non-graded secondary education).

4. Dahllöf, U. 1973: Glesbygden, högstadiet och utvärderingen av skolan. Särtryck ur Västerbottens-Kuriren 25 januari 1973. Rapporter från pedagogiska institutionen 89, Göteborgs universitet. Stencil.
(Sparsely populated areas, secondary school and evaluation of education).

5. Andrae, A. and Dahllöf, U. 1973: Process analysis of non-graded rural schools in Sweden. Outline of an evaluation project. Reports from the Institute of Education 31. Mimeo.

6. Hammarberg, B. 1974: Glesbygden och samhällsplaneringen. En översikt i anslutning till inom GeoPANG-projektet genomförda och förestående studier i valda undersökningsområden. PANG-projektet nr 6, 1974. GeoPANG 1974:1. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(Sparsely populated areas and the planning of society).

7. Johansson, H. 1974: TÄRNA. Samhällsgeografisk studie av ett högstadieområde i glesbygd. PANG-projektet nr 7, 1974. GeoPANG 1974:2. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(TÄRNA. A geographic study of a secondary school in a rural area).

8. Eklund, N.G. 1974: HALLEN. Samhällsgeografisk studie av ett högstadieområde i glesbygd. PANG-projektet nr 8, 1974. GeoPANG 1974:3. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(HALLEN. A geographic study of a secondary school in a rural area).

9. Tunbrå, K. 1974: RAMSJÖ. Samhällsgeografisk studie av ett högstadieområde i glesbygd. PANG-projektet nr 9, 1974. GeoPANG 1974:4. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(RAMSJÖ. A geographic study of a secondary school in a rural area).

10. Andrae, A. 1974 a: En formativ utvärdering av undervisningen vid en successiv övergång till årskurslös undervisning på grundskolans högstadium. Olika grad av årskurs-, ämnes- och kursintegrering i orienteringsämnen, svenska, engelska och matematik. PANG-projektet nr 10, 1974. Göteborg: Rapporter från pedagogiska institutionen 123, Göteborgs universitet. Stencil.
(A successive change to non-graded education at secondary school level. A formative evaluation of education. Integration of grades, subjects and courses in Social and Natural Sciences, Swedish, English and Math).

11. Andrae, A. 1974 b: Erfarenheter av en pilotstudie med intervjuer som underlag för kartläggning av problem rörande utbildningslokalisering i glesbygd. PANG-projektet nr 11, 1974. Göteborg: Rapporter från pedagogiska institutionen 124, Göteborgs universitet. Stencil.
(Experiences of a pilot study with interviews as a basis to list problems about education in sparsely populated areas).

12. Andrae, A. 1975: Konsekvenser av SIA:s förslag för resursfördelning till små högstadier i glesbygd. Några reflexioner. PANG-projektet nr 12, 1975. Göteborg: Rapporter från pedagogiska institutionen 125, Göteborgs universitet. Stencil.
(SIA:s suggestions of resources to small secondary schools in sparsely populated areas. Reflections on consequences).

13. Hammarberg, B. och Johansson, H. 1975: MOSKOSEL. Samhällsgeografisk studie av ett högstadieområde i glesbygd. PANG-projektet nr 13, 1975. GeoPANG 1975:1. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(MOSKOSEL. A geographic study of a secondary school in a rural area).

14. Eklund, N.G. och Hammarberg, B. 1975: SORSELE. Samhällsgeografisk studie av ett högstadieområde i glesbygd. PANG-projektet nr 14, 1975. GeoPANG 1975:2. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(SORSELE. A geographic study of a secondary school in a rural area).

15. Hammarberg, B. och Johansson, H. 1975: FREDRIKA. Samhällsgeografisk studie av ett högstadieområde i glesbygd. PANG-projektet nr 15, 1975. GeoPANG 1975:3. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(FREDRIKA. A geographic study of a secondary school in a rural area).

16. Lundqvist, Ö. 1975 a: Kulturellt utbud och politisk struktur i försöksområdena Hallen, Ramsjö, Solberg, Norra Ny och Tärna. PANG-projektet nr 16, 1975. GeoPANG 1975:4. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(Cultural supply and political structure in the experimental areas of Hallen, Ramsjö, Solberg, Norra Ny and Tärna).

17. Lundqvist, Ö. 1975 b: NORRA NY. Samhällsgeografisk studie av ett högstadieområde i glesbygd. PANG-projektet nr 17, 1975. GeoPANG 1975:5. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(NORRA NY. A geographic study of a secondary school in a rural area).

18. Karlsson, S.O. 1975: MALUNG. Samhällsgeografisk studie av ett högstadieområde i glesbygd. PANG-projektet nr 18, 1975. GeoPANG 1975:6. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(MALUNG. A geographic study of a secondary school in a rural area).

19. Dunder, K.E. 1975: SOLBERG. Samhällsgeografisk studie av ett högstadieområde i glesbygd. PANG-projektet nr 19, 1975. GeoPANG 1975:7. Umeå: Geografiska institutionen, Umeå universitet. Stencil.
(SOLBERG. A geographic study of a secondary school in a rural area).

20. Andrae, A. 1976: Non-graded instruction in small rural lower secondary schools. A presentation of the PANG-project. Paper read at the INTERSKOLA conference in Sveg, July 1976. Reports from the Institute of Education 50. Mimeo.

Reports from the Institute of Education, University of Göteborg

1. Andersson, Bengt-Erik o. Nilsson, S-G: An application of the critical incident technique to the study of job and training requirements of shop mangers. June 1962.

2. Bullock, Donald, H: Research in programmed learning: Description of and Rationale for A Program of Experimental Analysis. November 1965.

3. Härnqvist, Kjell: Social Factors and Educational Choice. 1965.

4. Härnqvist, Kjell: Relative changes in intelligence from 13 to 18. December 1967.

5. Dahllöf, Urban o. Lundgren, Ulf P: A project concerning macromodels for the curriculum process. A short presentation. Project COMPASS 12. April 1969.

6. Andersson, Bengt-Erik: Project YG (Youth in Göteborg) - A presentation of background, design, instruments and populations. Project UG 9. June 1969.

7. Dahllöf, Urban: Ability grouping, content validity and curriculum process analysis. Project COMPASS 13. June 1969.

8. Dahllöf, Urban: Research on oral examination within the International Baccalaureats: Some general points of view and some inferences from the psychology of interviewing. Project COMPASS 20. January 1970.

9. Dahllöf, Urban: The materials and methods of implementation in the development of the curriculum. Outline of a model and some illustrations from Sweden. Paper read at the Conference of Comparative Education Society in Europe, Prague, June 1969. Project COMPASS 21. January 1970.

10. Dahllöf, Urban o. Lundgren, Ulf P: Macro and micro approaches combined for curriculum analysis: A Swedish educational field project. Paper read at the annual meeting of the American Educational Research Association in Minneapolis, March 2-6, 1970. Project COMPASS 23. April 1970.

11. Andersson, Bengt-Erik: Actual and perceived attitudes among adolescents and adults toward each other. A study of a group of Swedish teenagers and their parents. The Stug-project 3. April 1971.

12. Andersson, Bengt-Erik: Parental and peer influences and adolescent peer orientation. Project UG 12. April 1971

13. Andersson, Bengt-Erik o. Ekholm, Mats: The generation gap. Frame of reference and design of the Stug-Project. The Stug-project 4. May 1971.

14. Andersson, Bengt-Erik o. Ekholm, Mats: Swedish Youth of To-day. Description of a Research Project About the Generation Gap. Paper presented to the International conference on "Socialization Processes in the Contemporary European Youth" in Bratislava June 14-17, 1971. The Stug-project 5. June 1971.

15. Marton, Ference o. Sandqvist, Gjertrud: Learning while typing. TIPS 3. September 1971.

16. Dahllöf, Urban, Lundgren, Ulf P o. Siöö, Margareta: Reform implementation studies as a basis for curriculum theory: Three Swedish approaches. Reprint from curriculum Theory Network 7, 1971: Monograph Supplement: Elements of Curriculum Development, edited by F. Michael Connelly with the assistance of John Herbert and Joel Weiss. Project COMPASS 39. December 1971.

17. Lundgren, Ulf P: An empirical study of the teaching process. Theory, design and methodology. Project COMPASS 40. January 1972.

18. Härnqvist, Kjell: Training and career structure of educational researchers. Reprint of paper read at Colloquium of Directors of Educational Research Organizations, London 10-12, November 1971, arranged by Council of Europe. March 1972.

19. Härnqvist, Kjell: Canonical analyses of mental test profiles. Project MID 2. April 1972.

20. Härnqvist, Kjell o. Bengtsson, Jarl: Educational reforms and educational equality. Contribution to a Reader on Social Sratification edited by Scase. April 1972.

21. Bradley, Gunilla: Women´s interest in promotion in relation to job satisfaction and home and school background. September 1972.

22. Åsberg, Rodney: An attempt at a Pedagogical Evaluation of the Development Studies in Lund 1969-70: Housing, Building and Planning. May 1971.

23. Marton, Ference; Fransson, Anders; Jonsson, Barbro; Klenell, Ann-Charlotte o. Roos, Birgitta: Differential effects of stress-including instructions on anxiety. TIPS 7. October 1972.

24. Lundgren, Ulf P: Educational Process Analysis. Two articles. Project COMPASS 48. November 1972.

25. Lundgren, Ulf P: Pedagogical frames and the teaching process. A report from an empirical curriculum project. Paper read at the AERA meeting in New Orleans, 26 Feb - 1 March 1973. Project COMPASS 51. February 1973.

26. Andrae, Annika: Late-bloomers and alternative courses of study at the senior level of the compulsory comprehensive school and qualification for academic education at the upper secondary level. Project COMPASS 54. February 1973.

27. Lundgren, Ulf P: Pedagogical roles in the classroom. A contribution to Eggleston, J, 1973: Contemporary Research in the Sociology of Education. London: Methusen. Project COMPASS 56.

28. Andersson, Bengt-Erik: The Generation Gap - Imagination or Reality? Paper presented to the annual meeting of the International Society for the Study of Behavioral development. The Stug-project 21. May 1973.

29. Andersson, Bengt-Erik: Project YG (Youth in Göteborg) - A Study of a group of Swedish urban adolescents. Project UG 13. June 1973.

30. Dahllöf, Urban: Data on curriculum and teaching process: Do they make any difference to non-significant test differences - under what conditions? Address to division B of the American Educational Research Association. Feb 27, 1973. Project COMPASS 60. August 1973.

31. Andrae, Annika o. Dahllöf, Urban: Process Analysis of Non-Graded Rural Schools in Sweden. Outline of an Evaluation Project. Project PANG 5. February 1973.

32. Lundgren, Ulf P o. Wallin, Erik: Some Notes on Education as a Science. September 1973.

33. Norvell, Bo: The Class Size and the Teaching Process. Part 1. October 1973.

34. Härnqvist, Kjell: Individual differences in higher education: Selection or Adaption? Plenary lecture at the Congress on Methodology of Research in Higher Education, Rotterdam, 3-5 December 1973. Project MID 9. December 1973.

35. New Trends in Evaluation. Report from a conference on educational evaluation with an introductory paper by professor Robert E. Stake, University of Illinois. January 1974.

36. Gustafsson, Jan-Eric: Verbal versus Figural Aptitude-Treatment Interactions. Review of the literature and an empirical study. Project MID 10. March 1974.

37. Lindblad, Sverker: Simulation and guidance. Experiences from planning and evaluation teaching with simulation designed for grade 6 in Swedish compulsory schools. Project-group UPLM 24. April 1974.

38. Gustafsson, Jan-Eric: Implications of interactions for the experimental research on teaching methods. Project MID 12. June 1974.

39. Marton, Ference: On non-verbatim learning: 1. Level of processing and level of outcome. December 1974.

40. Marton, Ference: On non-verbatim learning: 11. The erosion effect of a task-induced learning algorithm. December 1974.

41. Marton, Ference o. Dahlgren, Lars-Owe: On non-verbatim learning: 111. The outcome space of some basic concepts in economics. December 1974.

42. Marton, Ference: On non-verbatim learning: IV. Some theoretical and methodological notes. December 1974.

43. Lundgren, Ulf P: Analyse von Curriculumprozessen - der engere Ansatz: Curriculum-prozess als Instruktionsgeschehen. Research Report from the MAP-group 1975:1. January 1975.

44. Marton, Ference; Dahlgren, Lars-Owe; Säljö, Roger o. Svensson, Lennart: The Göteborg Project on Nonverbatim Learning. Four invited papers presented at the American Educational Research Association, 30 March - 3 April, Washington, DC. April 1975.

45. Kilborn, Wiggo o. Lundgren, Ulf P: A Contribution to the Analysis of Arithmetic Teaching and Learning. A paper presented at the first DIMO-workshop, 31st of August - 5th of September, 1975, in Wasserlos, BDR. Research Report from the MAP-group 1975:14. December 1975.

46. Gustafsson, Jan-Eric: Inconsistencies in aptitude-treatment interactions as a function of procedures in the studies and methods of analysis. Project MID 16. March 1976.

47. Gustafsson, Jan-Eric: Differential effects of imagery instructions on pupils with different abilities. Project MID 17. April 1976.

48. Ekholm, Mats: Social development in school. Summary and excerpts. Project SOS 23. May 1976.

49. Stangvik, Gunnar: Approaches to the analysis of learner-task interactions and some implications for the study of pedagogical processes. Project YP 7. January 1976.

50. Andrae, Annika: Non-graded instruction in small rural lower secondary schools. A presentation of the PANG-project. Paper read at the INTER-SKOLA conference in Sveg, July 1976. Project PANG 20, July 1976.